

Remarks/Arguments:

These remarks are responsive to the Office Action of December 31, 2007. The specification has been amended to correct typing errors pointed out in the Office Action. Claims 1-25 were examined in the Office Action. Alternative language for claim 7 is suggested by the Office Action. However, Applicants respectfully point out that the language of claim 7 is not incorrect and is not in opposition to any rules in the MPEP. Applicants respectfully request reconsideration of the language of claim 7.

All pending claims stand rejected under 35 USC Section 112 as indefinite. Applicants respectfully traverse these rejections for the reasons discussed below.

The Office Action objects to the terms selected by Applicants to describe the claimed subject matter (OA, paragraphs 11-15). However, when terms are not to be used according to their ordinary meaning, an Applicant may act as his own lexicographer (MPEP 2111.01 (IV)). The descriptive terms at issue are either well-known in the art or are defined in the specification. As Applicants are allowed to describe their invention in their own terms, and have made the meaning of those terms clear, they respectfully request that the rejection of claims 1-25 for indefiniteness be withdrawn.

Claim 10 stands rejected as failing to comply with the written description requirement of Section 112. Applicants traverse this rejection for the following reasons. Claim 10 is directed to the construct of claim 1, wherein the chemical functional group is selected from a group of specific common chemical functional groups, such as hydroxyl groups, sulfhydryl groups, carboxy groups, etc. According to the Office Action, Claim 10 does not provide sufficient written description under the *Eli Lilly* standard, because "the instant claims define the claimed products only by their functional properties, e.g. derivatives of chemical functional groups," (OA at paragraph 18). The Office Action maintains that such functional descriptions are not sufficient for genetic material and cites the *Eli Lilly* opinion. Applicants respectfully point out that the claimed product is not genetic material and that a chemical functional group comprises a *structural* description. The *Eli Lilly* standard for genetic material is not applicable to claim 10. Therefore, Applicants respectfully request that the rejection of claim 10 for insufficient written description be withdrawn.

Claims 1-6, 8-10, and 19 stand rejected under 35 USC 102(e) as allegedly anticipated by Simonnet. Claims 1, 2, 5, 6, 8-11, 13-20, 22 and 24 stand rejected under 35 USC 102(e) as allegedly anticipated by Ketelson, and claims 1, 2, 5, and 6 stand rejected under 35 USC 102(b) as allegedly anticipated by Oppenheim. Applicants traverse these rejections for the following reasons. Neither Simonnet, Ketelson, nor Oppenheim describes a construct comprising a nanoparticle attached to a monomolecular layer comprising biological information, which is dispersed within a polymeric matrix. Simonnet describes a nanocapsule with a lipid core surrounded by a water-insoluble polymer membrane. Ketelson discloses *inorganic* nanoparticles used to modify viscosity in ophthalmic compositions. Oppenheim discloses a particle composed of a colloidal matrix of a macromolecule wherein pharmacological agents are dispersed in the matrix. As none of these references recites all elements of the rejected claims, Applicants request that the Section 102 rejections of claims 1-6, 8-11, 13-20, 22 and 24 be withdrawn.

Claims 1-25 stand rejected under 35 USC Section 103 for obviousness. Applicants traverse this rejection. As discussed above, Simonnet, Ketelson, and Oppenheim fail to disclose all the limitations of Applicants' claimed invention. Neither of the secondary references, Perez nor Li, provides the claim elements missing from Simonnet, Ketelson, and Oppenheim. Perez describes how to encapsulate DNA inside a nanoparticle. It does not describe a monomolecular layer of biological information associated with the nanoparticle or dispersion of this structure within a polymeric matrix. Li discloses the use of calcium phosphate in combination with an effervescent agent as a carrier for an osteogenic protein. Li does not suggest that the protein is present as a monomolecular layer attached to a nanoparticle, which is dispersed in a polymeric matrix. The Office Action does not give any reason why Li in combination with another reference would render Applicants' claimed invention obvious. Therefore, Applicants respectfully request that the Section 103 rejection of claims 1-25 be withdrawn.

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Amendment Dated April 29, 2008
Reply to Office Action of December 31, 2007

RCHP-128US

Conclusion

For these reasons, it is respectfully submitted that the claims are in condition for immediate allowance and a notice to this effect is solicited. The Examiner is invited to phone Applicants' attorney if it is believed that a telephonic interview would expedite prosecution of the application.

Respectfully submitted,



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